

VSAT Service Tariff Information

Service Provider	Es'hailSat – Qatar Satellite Company		
License	Public Satellite Telecommunications Networks and Services		
Tariff Number	ETC-B-06		
Service Name	VSAT Service		
Tariff Type	Business		
Tariff Effective Date	03 February 2019		
Tariff Effective Region	Qatar		
Tariff Version Number	Version 1.0		



1. Definitions

- 1.1. Baseband Equipment: Satellite MODEMS
- 1.2. BSC: Base Station Controller
- 1.3. BTS: Base Transmitting Station
- 1.4. CRA: Communications Regulatory Authority, State of Qatar and its successors and assigns
- 1.5. Customer: means the customer whether a natural or legal entity as stated in the relevant Service Order or MSA accepted by Es'hailSat
- 1.6. Demodulator: A demodulator is an electronic circuit (or computer program in a software-defined radio equipment) that is used to recover the information content from the modulated carrier wave.
- 1.7. Downlink: speed at which the demodulator receives the data
- 1.8. Es'hailSat: means Qatar Satellite Company, a private Qatari joint stock company incorporated and registered in Qatar, commercial registration number 46978, whose registered office is at Property No. 414, Al Markhiya Street No. 380, Area No. 31, Umm Lakhba, Doha, Qatar
- 1.9. Hub: A VSAT Hub where all services are aggregated
- 1.10. Ka-Band: The Ka-band is a portion of the microwave part of the electromagnetic spectrum defined as frequencies in the range 18 22 GHz in Es'hailSat assigned frequency spectrum.
- 1.11. Kbps: Kilobits per second
- 1.12. LAN: Local Area Network
- 1.13. Mbps: Megabits per second
- 1.14. MODEM: A network hardware device that modulates one or more carrier wave signals to encode digital information for transmission and demodulates signals to decode the transmitted information.
- 1.15. Modulator: Devices that performs modulation which is a process of conveying message signal, for example, a digital bit stream or an analog audio signal, inside another signal that can be physically transmitted.
- 1.16. "Master Service Agreement or MSA: means the detailed terms and conditions applicable to the Service including the relevant Service Order entered between Es'hailSat and the Customer.



- 1.17. MSC: Master Switching Centre
- 1.18. PSTN: Public Switch Telephone Network
- 1.19. QoS: Quality of Service
- 1.20. Remotes: VSAT terminal located offshore or other locations and connected to a VSAT hub
- 1.21. RF: Radio Frequency
- 1.22. Service: VSAT service as more described in the Service Order or the MSA.
- 1.23. Service Delivery: is the service provided for installation, commissioning and testing for the deployment of ground equipment at the customer's location site.
- 1.24. Service Management: is after sales support for both preventive & corrective maintenances at the customer's location site.
- 1.25. Service Order: means the document setting out, inter alia, the technical and commercial specifications of the Service, together with any annexes or other additional Contractual documents.
- 1.26. Tariff: means Tariff Number ETC-B-06 for VSAT Service
- 1.27. Uplink: speed at which the modulator transmits data
- 1.28. VSAT: Very Small Aperture Terminal
- 1.29. WWW: World Wide Web



2. Specific Tariff Terms & Conditions

- 2.1. Tariff listed below is for fixed term standard service. Prices for customized services may vary but shall remain consistent with Tariff listed herein.
- 2.2. With respect to Managed Hub Service Charges, the minimum service period is three (3) months. Cancellation of the Service by the Customer prior to completion of the minimum service period will result in applicable Service Charges due and payable for the remaining months of the minimum service period.¹
- 2.3. The Tariff contains actual monthly charges and conditions applicable to the provision of VSAT services, as well as a description of all charges for additional or supplementary services provided by Es'hailSat including but not limited to hardware equipment, service management and service delivery.
- 2.4. This Tariff is effective as per the date mentioned above and will automatically cease being effective if Es'hailSat publishes a new tariff for VSAT Service or publishes notification on its webpage that this Tariff is no longer effective subject to CRA approval, if required.
- 2.5. The Tariff's terms and conditions apply in addition to the terms and conditions specified in Es'hailSat's General Term and Conditions for Telecommunications Services referenced at [www.eshailsat.qa] and the Master Services Agreement (MSA) for VSAT Service.
- 2.6. VSAT service terms and conditions shall be subject to the MSA executed between Es'hailSat and the Customer. The MSA shall include Es'hailSat's detailed terms of service and service level agreement (where applicable).

3. **Service Definition**

- 3.1. VSAT is a two-way satellite communications system that serves business customers with a dish antenna that is typically smaller than 3.8 meters. VSATs access satellites in geosynchronous orbit or geostationary orbit to relay data from small remote Earth stations (terminals) to other terminals (in mesh topology) or master Earth station "hubs" (in star topology).
- 3.2. VSAT systems provide high speed, broadband satellite communications for Internet or private network communications which includes data, voice and video signals utilizing high performance satellite modems which acts as modulator & demodulators for wireless transmission.

¹ For the avoidance of doubt, the minimum service period for Equipment Purchase, Installation and Service (ref. clause 5.2) can be longer than three (3) months.



4. Service Description

4.1. **Es'hailSat Managed Hub Services** -Provides a fully managed hub-spoke networking system that consists of hub and remote terminal component utilizing a master Earth station "hub" (in star topology) connecting to remote terminals.

In star topology, each VSAT terminal transmits and receives only to the hub/teleport which then interconnects to public infrastructure. VSAT remote stations communicate amongst themselves via the hub. The majority of VSAT networks use star topology because the large antenna gain at the hub optimizes the use of the satellite space segment and thus minimizes the size and cost of the VSAT terminal required at the remote site.



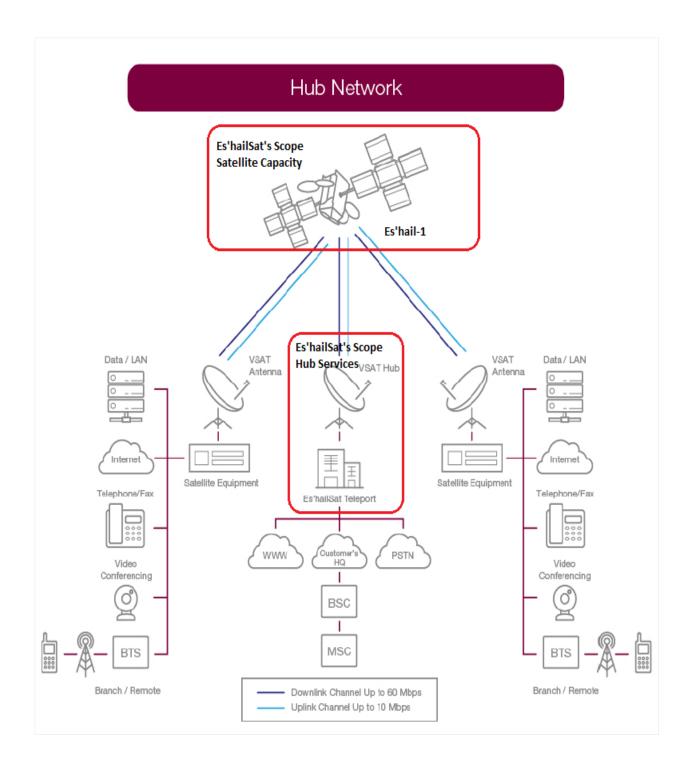


Figure 1: Es'hailSat Hub Managed Services Network Diagram



5. Charges

5.1. **Managed Hub Service Charges -** Subject to feasibility of the satellite link budget analysis, the following table provides the monthly fee depending on the uplink / downlink speed combination in USD / QAR.

Bandwidth	QAR / month
128 kbps / 128 kbps	9,125
256 kbps / 256 kbps	10,950
512 kbps / 512 kbps	18,250
786 kbps / 786 kbps	25,550
1 Mbps / 1 Mbps	33,945
1.5 Mbps / 1.5 Mbps	49,275
2 Mbps / 2 Mbps	60,225
4 Mbps / 4 Mbps	113,150
6 Mbps / 6 Mbps	164,250
8 Mbps / 8 Mbps	219,000
10 Mbps / 10 Mbps	281,050

Table 1: Hub Managed Service Charges

Notes:

- i. Hub Managed Services tariff above assumes Es'hailSat's 4.8m Ka-Band Hub Earth Station antenna operating from Qatar Earth Station.
- ii. Charges above exclude the remote terminal VSAT equipment which is combination of the RF equipment (amplifier, upconverters), baseband (satellite modem) & network equipment (router, switches, access points).
- iii. To ensure a Customer meets its financial obligations there is a requirement of a Bank Guarantee / Security Deposit from the Customer. This amount of the Bank Guarantee / Security Deposit is dependent on the Customer's risk profile, the project value and the project duration.



5.2 Equipment Purchase, Installation and Service Charges

There are three types of scenarios applicable with respect to the Service described as follows (see table below).

- a) Scenario 1: Customer purchase equipment from a third party;
- b) Scenario 2: Customer purchase equipment from Es'hailSat; or
- c) Scenario 3: Customer rents equipment from Es'hailSat.

Scenario / Contract Model	Equipment Charges (i) (ii)	Service Delivery Charges ⁽ⁱⁱⁱ⁾	Service Management Charges ^(iv)		
			Preventive Maintenance (PM) ^(v)	Corrective Maintenance (CM) ^(vi)	
Scenario 1	N/A	Optional	Optional	Optional	
Scenario 2	Separate	Separate	Inclusive	Inclusive	
Scenario 3	All-Inclusive Monthly Rental				

Notes:

- i. Charges for equipment at the remote terminal VSAT will depend on bandwidth requirement and combination of equipment employed (i.e. antenna sizes, amplifiers sizes, satellite modems, licensing on the modems based on capability & features, traffic optimizer & accelerator etc.).
- ii. Equipment to be deployed are subject to link budget analysis to be performed by Es'hailSat.
- iii. Service Delivery charges for installation, commissioning and testing for the deployment of ground equipment at the customer's location will be charged for materials used and labor supplied. Rates are dependent on the location (offshore/onshore) as well as the sizes of the VSAT antenna(s) and the satellite modem & networking equipment requirement.
- iv. Service Management at the site of the customer's location will be charged a fixed service fee per visit, independent of man-hours of QAR 3,650.
- v. Preventive Maintenance (PM): 4 annual or 1 quarterly PM visit at the site.
- vi. Corrective Maintenance (CM): Subject to reasonable number of CM visit requests as agreed with the customer in the respective contract. Any additional CM visits will be charged as per Notes.



6. Service Provider Obligations

- 6.1. **Commencement of Service**: The service shall commence from the Service Connection Date.
- 6.2. **Service Responsibility**: Es'hailSat shall be responsible for services up to the point of interface between the Customer equipment and Es'hailSat equipment, and shall not be responsible for quality of service, continuity of service or other matters impacted by equipment or other facilities on the customer side. The point of service interface on the network side shall be the satellite footprint.
- 6.3. **QoS** and availability: Quality of service and availability may be impacted by various factors beyond Es'hailSat's control such as network changes, traffic volume, transmission limits, service outages, technical limitations, signal strength, customer device, terrain, structures, weather, etc. Subject to statutory and license obligations and requirements, Es'hailSat shall not be liable for any service limits that may arise due to these conditions.

7. Customer Obligations

7.1. Equipment:

- 7.1.1. The Customer shall comply with any reasonable request made by Es'hailSat with regards to the configuration of the customer devices and/or the use of the service.
- 7.1.2. Upon approval by Es'hailSat, customer may undertake importation of suitable type-approved equipment, through an authorized dealer.
- 7.1.3. The Customer shall be responsible for the necessary permissions for the installation and positioning of customer equipment, and further be responsible for the safety of persons with access to area of installation.
- 7.2. **Cancellation**: Once the Subscriber's Service has commenced or the Subscriber's account has been activated, the Subscriber may cancel the Service for any reason. If the Subscriber cancels the Service before the Minimum Service Period, Es'hailSat may charge the Subscriber an early cancellation fee equal to the amount due under the remaining term of the Minimum Service Period ("Cancellation Fee"), or as provided in the Service Tariff.
- 7.3. Subject to the applicable terms and conditions in the applicable Service Tariff, cancellation after the end of the Minimum Service Period will not result in any additional liability as a result of the cancellation
- 7.4. **Assignment**: The customer undertakes to use the service for their own business use, and shall not transfer or assign the service to a third party without obtaining Es'hailSat's prior written consent.
- 7.5. **Unlicensed Services**: The customer shall not use the service to provide any form of telecommunications services that require a license from CRA. Failure to comply with this provision may result in immediate cessation of service without notice.



- 7.6. **Agreement**: The Customer shall adhere to the terms and conditions of the MSA and Es'hailSat General Term and Conditions for Telecommunications Services where referenced.
- 7.7. **Customer service and compliant**: for customer service and complaint, the Customer my contact Es'hailSat at:

Property No. 414, Al Markhiya Street No. 380, Area No. 31, Umm Lakhba,

P.O. Box 10653, Doha, Qatar

Email: sales@eshailsat.qa

TARIFF MODIFICATION TABLE

Tariff Modification Version Number	Effective Date	Description of Change
ETC-B-06 (Version 1.0)	03 February 2019	1 st Edition